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Cyst rupture during surgery

Sir—Ignace Vergote and colleagues (Jan 20, p 176)[1] have done a thorough extensive study of 1545 patients to analyse prognostic factors in early-stage ovarian cancer. They conclude that tumour differentiation is the most important prognostic factor, a notion supported by several previous smaller scale studies.[2,3]

However, we doubt their observation that cyst rupture during surgery is an independent unfavourable prognostic factor with an impact on prognosis. We especially disagree with their recommendation to restrict use of laparoscopic surgery for treatment of ovarian cysts.

The strength of the study is in its size, but since it is retrospective, there are many possible confounding variables. It seems almost impossible to conclude about the nature and timing of ovarian-cyst rupture on the basis of the retrospective surgical reports. Because this study includes seven hospitals from six countries, undoubtedly with many surgeons with no common surgical reporting system, we cannot accept the proposed results concerning cyst rupture. Moreover, in only 277 Danish patients of the total 1545 cases was a routine pelvic washing done as part of the surgical staging. These missing data are essential to assess the prognostic value of cyst rupture during surgery. Thus, smaller studies that have been designed and recruited in a more homogeneous setting, seem more reliable.[3,4]

Laparoscopic minimally invasive surgery for the treatment of ovarian cysts has gained popularity in the past decade. Its biggest advantage, is the quick recovery associated with the technique, which allows patients to undergo the procedure as outpatients and to return to normal activities within a few days. Although some reports imply tumour spread after laparoscopy, this issue is controversial and difficult to establish from the current reports.[5] In many cases, the true malignant potential of ovarian cysts is difficult to predict, and most ovarian cysts that arise in the menopausal years will be benign. Therefore, restriction of the use of laparoscopic surgery in these circumstances is unreasonable. Proper selection of patients for laparoscopic surgery should lower the incidence of encountering cancer. Use of retrieval bags and frozen pathology sections, with conversion to laparotomy when cancer is diagnosed, will eliminate the possible negative harmful effects that might be associated with laparoscopic surgery. Prospective clinical trials are needed to clarify the prognostic value of intraoperative rupture of cysts and the role of laparoscopic surgery in early stage ovarian cancer.

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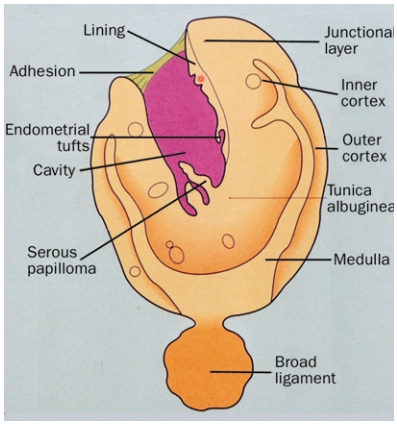
Sir—Chocolate or endometrial cysts of the ovary are frequently noted in women attempting their first pregnancy. The chocolate cyst is a pseudocyst, but is currently classed as an ovarian cyst. Surgery by laparoscopy or laparotomy can lead to spillage. Ignace Vergote and colleagues[1] recommend that removal of ovarian cysts be restricted to women with benign cysts. We report surgery for such a cyst, done to avoid spillage.

A woman aged 25 years, had been previously treated for a multilocular cyst. Computed tomography had confirmed the cyst type and cystadenocarcinoma was suspected. Magnetic resonance imaging suggested endometriosis, but could not distinguish between blood clots and mural proliferations. On radiography, focally decreased expansion of the rectum and displacement of the left ureter without obstruction were seen. Ultrasonography suggested an endometrioma, but papillary projections and, therefore, borderline malignancy could not be excluded.



Section through typical ovarian endometrioma
Reproduced, with permission, from: Hughesden PE. The structure of endometrial cysts. *Obstet Gynaecol Br Empire* 1957; **64:** 482.

After midline incision, we diagnosed a typical endometriotic cyst with no other lesions. After we had inserted a stent into the ureter, we dissected the internal iliac artery, ureter, and rectosigmoid. The uterine artery had to be clipped to remove the tumour entirely. No malignant disease was identified in frozen sections. Postoperative haemoglobin concentration was 7 g/dL and the hospital stay lasted 17 days.

On three biopsy samples we saw a fibrotic wall lined by endometrial epithelium and some stroma. Samples from outside the cyst showed implants with glandular elements. The patient was advised to become pregnant after 6 months' treatment with a gonadotropin-releasing-hormone agonist, and was informed that recurrence on the right side could require similar surgery.

The complex pathology of ovarian endometrioma makes preoperative exclusion of malignancy almost impossible. Endometrial tissue is present in the cavity, and the site of so-called perforation is characterised by polypoid endometrium, old blood clots, fibrosis, and retraction on the inside, and dense adhesions with adenomyotic lesions on the outside. haemorrhagic dysfunctional cysts, some in contact with the endometriotic cavity, add to the multilocular structure. However, inability to exclude malignancy on imaging is not a justification for surgery.